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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/989,866 | 11/19/2001 | Yoshitoshi Kurose | FUJO19.189 | 2344 |

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| EXAMINER | |
|---|---|
| JOO, JOSHUA | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2154 | |

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/989,866 | KUROSE ET AL. | |
| | Examiner | Art Unit | |
| | Joshua Joo | 2154 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *02 July 1999*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-15 are presented for examination.

2. Claims 1-15 are rejected.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 6, 11 are rejected under 35 U.S.C. 102(e) as being unpatentable by Baugher et al, US Patent #6,101,549 (Baugher hereinafter).

5. As per claims 1, 6, 11, Baugher teaches an invention for using a proxy to make bandwidth reservation requests in behalf of routers. (Col 2, lines 45-53. The proxy protocol and other aspects of the invention are implemented by a CPU in a host computer or a router with memory such as RAM, ROM, or a mass storage device.) Baugher's invention comprises of:

a) A unit obtaining information about a network service provided by the first device (Col 7, lines 14-31. Proxy host receives information from a host. The application protocol provides to the proxy host, the parameters of the proxy header and other parameters needed by the bandwidth reservation protocol. Col 5, lines 20-38. The application protocol is implemented by an application handling operating in the sending host.),

b) A unit specifying the second device, which does not respond to the network service (Col 1, lines 34-37. Certain hosts may not be configured to run bandwidth reservation protocol or may not easily run multiple network applications concurrently. Col.4, lines 26-30. The proxy protocol sends RESV messages behalf of the receiving host or sends PATH messages on behalf of the sending host.),

c) A unit converting a setting content of the network service received by the first device and requested for the first device, to a setting content to which the second device can respond, and setting the setting content obtained by the conversion in the second device (Col 5, lines 38-47. The proxy host sets up the state in the appropriate router. Col 5, line 48 – Col 6, lines 19. To implement the proxy protocol, the messages communicated between the proxy and router are encapsulated and tunneled.), which

d) Performs control of the setting content of the second device that does not correspond to the network service by the first device, according to the network service request received by the first device (Col 1, lines 25-28. There are occasions when it may be desirable to use a third host e.g. proxy to make a bandwidth request. Col 5, lines 32-48. The proxy host sets up a state in the proxy handler of proxy host. After setting up the state, the proxy host sets up states in the RSVP handler of the appropriate router. The RSVP handler of the proxy sets up state in the appropriate router, depending on whether it is sending RESV messages or PATH messages. Col 7, lines 38-45. The proxy interface is not specific to a particular bandwidth management protocol but allows a variety of bandwidth management protocols to be implemented.).

***Claim R jections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3, 4, 8, 9, 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Livanos, US Patent #5,068,892.

8. As per claims 3, 8, 13, Baugher teaches the invention of using a proxy host to generate a bandwidth request for routing services. However, Baugher does not teach of a service allocating device according to claim 1, further comprising:

A priority route selecting unit selecting device for providing a higher function of a requested network service, of the first and second devices which are connected to the network, and determining a communications route through which the selected devices are connected and

A route comparison unit comparing a communications route used prior to a new network service request with a communications route determined by the priority route selecting unit.

9. Livanos teaches an invention for network management, where a node compares the identity of alternate routes in the network with the identity of previously tried alternate routes (Col 8, lines 24-28). If there is no alternate route or no alternate route which has not been tried, the node may provide backup route. The backup route test allows for special treatment for certain high priority call types (Col 8, lines 35-46). The nodes have processors associated with memory (Col 4, lines 14-25; Col 4, lines 54-56).

10. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baugher and Livanos because the teachings of Livanos to compared prior used routes and using a secondary route if alternate routes aren't available provides a route with sufficient bandwidth to establish a connection in real time, thus improving the quality of service of Baugher's invention.

11. As per claims 4, 9, 14, Baugher teaches the invention of using a proxy host to generate a bandwidth request for routing services. Baugher does not teach the service allocating device according to claim 3, further comprising

A route setting generating unit determining a communications route suitable for provision of the new network service based on a comparison result obtained by the route comparison section, which performs control so that the new network service can be provided, using a communications route determined by the route setting generating unit.

12. Livanos teaches an invention for network management, where a node determines whether or not communication route is available for a call service. If the route is available, a call is allowed to complete (Col 7, lines 10-17). The determination is made by comparing previously tried alternate routes (Col 8, lines 24-29). If there is no alternate route or no alternate route which has not been tried, the node may provide backup route. The backup route test allows for special treatment for certain high priority call types (Col 8, lines 35-46). The nodes have processors associated with memory (Col 4, lines 14-25; Col 4, lines 54-56).

13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baugher and Livanos because the teachings of Livanos to determine an available route based on comparison of other routes improves the quality of

service for the network by providing the optimal real time path available for the connection. The quality of service is improved by avoiding routes with network congestion.

14. Claims 2, 5, 7, 10, 12, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baugher, US Patent #6,101,549, and in view of Bertin et al, US Patent #5,687,167 (Bertin hereinafter).

15. As per claims 2, 7, 12, Baugher teaches the invention of using a proxy host to make connection requests for bandwidth reservations. However, Baugher does not teach the service allocating device according to claim 1, further comprising:

A service setting storing unit storing setting contents of the first and second devices, which respond to previous network services, and

A service competition calculating unit checking a competition relation between network service requests from a plurality of users based on information stored in the service setting storing location, adjusting the competition relation, and determining the setting contents of the first and second devices so as to respond to the network service to be provided.

16. Bertin teaches an invention for providing reservation of bandwidth to connections with higher priority. The origin node sends a bandwidth request to the transit nodes along the path of the connection, and each nodes responds with its current status (Col 13, lines 30-36). The router compares the priority status of the requested connection with the priority status of the established connections to determine which connection holds the priority. If the requested connection holds the higher priority, the previous connection might be terminated and might try to reestablish the connection on a new route. The transmit nodes keeps complete information about each connection (Col 13, line 64 -Col 14, lines 37). If the Path Selection process is

unable to find a path without stopping the services, the reserved bandwidth of the lower groups may be terminated or the bandwidth of the lower group maybe adjusted (Col 17, lines 15-32).

17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baugher and Bertin because both inventions teach a method of providing reservation of bandwidth to ensure a stable network connection. Furthermore, the teachings of Bertin to compare the priorities of connections and to provide bandwidth to a connection with a higher priority improves the quality of service of Baugher's invention because information such as voice packets carry real-time information and should be sent ahead of data packets to prevent delay in transmission.

18. As per claims 5, 10, 15, Baugher does not teach of the service allocating device according to claim 2, further comprising:

A service stoppage request generating unit obtaining information about a network service provision state of the first device, detecting provision stoppage of a network service by the first device based on the network service provision state information, and generating a service stoppage request,

A service setting storing unit storing a plurality of setting information to the first and second devices, which correspond to a network service that existed before provision stoppage of the network service is detected, and

A service competition calculating unit calculating a service competition relation that is modified by the detected provision stoppage of the network service according to both the service stoppage request and storage information of the service setting storing section.

19. Bertin teaches an invention for providing reservation of bandwidth to connections with higher priority. Bertin teaches of requesting priority of a new connection, in which if the priority level of the new request is higher than the existing connection, the service for the existing connection is stopped, which causes the lower priority connections to release the reserved bandwidth. The transit nodes store the complete information of the connections, and network connections that are preempted will attempt to reestablish connections on a new route. Network connections that have ended will attempt to reestablish themselves on a new route that avoids the busy links (Col 14, lines 1-36). The origin node communicates with the transit nodes to establish reservation along the link, and it receives responds from the transit nodes about their status (Col 13, lines 30-47).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Baugher and Bertin because both inventions teach a method of providing reservation of bandwidth to ensure a stable network connection. Futhermore, the teachings of Bertin to stop a previous connection with lower priority, to compare the relationship of the request, and to determine a service to be modified improves the efficiency of Baugher's invention by providing the best possible paths to accommodate connections of higher priority regardless of the orders of the established connection.

***Conclusion***

21. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

> Shaffer et al, US Patent #6,657,965, teaches an invention for establishing a connection based on priority in a reservation protocol.

22. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966 and fax number is 571 273-3966. The examiner can normally be reached on Monday to Thursday 8 to 5:30.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 571 272-3964.

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 18, 2005
JJ

JOHN FOLLANSBEE
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